

## CLAIMS:

1. A security system for facilitating transponder carrier identification and tracking within a secure area comprising:

an RF transponder having a memory in which is stored a unique identifier; and

a transponder writer operable to send a replacement unique identifier to the transponder, the transponder replacing the identifier in the transponder memory with the replacement identifier.

2. A security system according to Claim 1, wherein the transponder has a fixed unit identifier serving to identify the transponder, the fixed unit identifier being a separate identifier to the unique identifier.

3. A security system according to Claim 2, wherein the unique identifier comprises an identity code.

4. A security system according to Claim 1, wherein the unique identifier is encrypted and assigned by a security processor.

5. A security system according to Claim 3, wherein the transponder includes a transmitter to transmit the unique identifier.

6. A security system according to Claim 5, wherein the transmitter is a contactless transmitter operable to transmit RF signals.

7. A security system according to Claim 5, wherein the transmitter is a contact transmitter operable to send signals to a unit in contact with the transponder.

8. A security system according to Claim 3, further comprising a transponder reader to receive from the transponder at least the unique identifier of the transponder.

9. A security system according to Claim 8, wherein the transponder reader interrogates the transponder and, in response to the interrogation, receives from the transponder at least the unique identifier of the transponder.

10. A security system according to Claim 9, wherein the transponder reader is mounted within the secure area and has a location code which provides information as to the location of the transponder reader.

11. A security system according to Claim 10, wherein the transponder reader is portable and operable within the secure area.

12. A security system according to Claim 9, wherein the transponder reader has a predetermined interrogation range such that a transponder within the interrogation range will receive an interrogation signal from the reader and will respond thereto by sending its unique identifier.

13. A security system according to Claim 1, further comprising a security processor having an access database setting out access parameters for the secure area and a carrier of a transponder, the security processor being operable to receive information from the transponder reader comprising at least the unique identifier of an interrogated transponder and the location of the transponder reader.

14. A security system according to Claim 13, wherein the security processor determines from consultation of the access database whether the carrier is authorised to be in the vicinity of the interrogating transponder reader and further determines what, if any, action needs to be taken.

15. A security system according to Claim 13, further comprising an actuator controllable by the security processor to effect operation of a device in response to a condition determined by the security processor.

16. A security system according to Claim 15, wherein the device activated by the actuator is selected from the group consisting of: an image capture device; an alarm; an alert system; a lock; an emergency door release; a speaker; and a communication device.

17. A security system according Claim 1, wherein the transponder is configured as a card having a contact terminal.

18. A security system according to Claim 17, wherein a card reader/writer is provided having a contact region compatible with the card contact terminal, wherein the transponder is addressable by the card reader when the terminal and contact region are in contact with one another.

19. A security system according to Claim 18, wherein the card reader/writer is operable to write the replacement unique identifier to the transponder.

20. A security system according to Claim 18, wherein the card reader/writer is integrated with an identification authentication device so as to authenticate the identity of a carrier of the transponder prior to writing a replacement unique identifier to the transponder of the carrier.

21. A security system according to Claim 1, wherein the carrier is selected from the group consisting of: personnel; a vehicle; and a hardware product.
22. A security system according to Claim 1, wherein the unique identifier has an expiry time after which the unique identifier is no longer valid.
23. A security system according to Claim 1, wherein the system is enabled by one of the following methods: Internet enabled, wireless enabled, hardwired, intranet enabled and combinations thereof.
24. An RF transponder for use in a security system for facilitating transponder carrier identification and tracking within a secure area comprising:
  - a first memory in which is stored a replaceable unique identifier; and
  - a transmitter operable to send the unique identifier in response to an interrogation signal.
25. An RF transponder reader operable to send an interrogation signal to an RF transponder having a unique identifier and receive from the transponder, in response to the interrogation signal, the unique identifier, the reader being operable to transmit the unique identifier to a security processor for identity verification.
26. An RF transponder reader according to Claim 25, wherein the reader is a portable unit.
26. An RF transponder reader according to Claim 25, wherein the reader is integrated with a data archiving system.

27. An RF transponder reader according to Claim 26, wherein the data archiving system is a personal digital assistant.
28. An RF transponder reader according to Claim 25, wherein the reader incorporates a cellular telephone system.
29. A method of identity verification comprising the steps of:  
interrogating an RF transponder with an interrogation signal;  
receiving a unique identifier from the transponder provided in response to the interrogation signal;  
authenticating the identity of a user carrying the transponder;  
assigning a replacement unique identifier; and  
writing the replacement unique identifier to the transponder to replace the received unique identifier.